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Amendments to the Specification

[0054] It is along this To_des line that the feasible solution space within Ta and Tb is presently relevant. Similarly, it is along this To_des line that that the feasible input torques, ~~-400 Nm > Ti > 1000~~ -400 Nm < Ti < 1000 Nm are presently relevant. It is also along this To_des line that the feasible battery powers, ~~Pbatt_min > Pbatt > Pbatt_max~~ Pbatt_min < Pbatt < Pbatt_max are presently relevant. The overall feasible solution space for To_des, therefore, is variously bounded by present capabilities as presented as minimum and maximum motor unit torques, input torques, and battery powers.

[0058] A section search is preferably performed with the objective of quickly converging upon a preferred input torque operating point as described below. Within the maximum and minimum input torque limits, Ti_min and Ti_max, already established, an evaluation input torque, Ti_n, is selected at step 133. Evaluation input torque are preferably established in accordance with the well known golden section ratio wherein the entire range of remaining feasible input torques, (Ti_min to Ti_max in the initial iteration) is effectively divided into two regions having the ratios ~~and 1-Φ~~ and 1-Φ with respect to the whole region wherein

$$\Phi = (\sqrt{5} - 1) / 2 \text{ which is approximately equal to } 0.61803...$$

In subsequent iterations, the Φ ratio section is measured off with respect to a newly established boundary of the region to be evaluated as explained at a later point more fully in conjunction with the illustration of FIG. 6.

[0075] A section search performed in accordance with the described golden section ratio reduces the range of feasible input torques upon each subsequent evaluation by a factor of [1-] 1-Φ, or approximately 0.38197. Accuracy to within less than 1.0% can be established with eleven such evaluations. Modern engine controls are typically limited to control accuracy of substantially 1.0%. Evaluations beyond eleven are not presently believed to be of significant benefit. Hence, eleven such evaluations with the preferred golden section ratio search is the preferred number of evaluations performed.